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| 09/487,383      | 01/18/2000  | Michael R. Bedford   | 68019               | 3100             |

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EXAMINER

MELLER, MICHAEL V

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1654

DATE MAILED: 12/18/2002

23

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/487,383

Applicant(s)

BEDFORD ET AL.

Examiner

Michael V. Meller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-8,13,15,17,18,21-26 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 6-8, 13, 15, 17, 18, 21-26 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 112***

Claims 1, 3, 6-8, 13, 15, 17, 18, 21-26 and 29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant has amended the claims to recite, "a method for treating or preventing a bacterial infection in a chicken". Applicant has not shown in the specification that the method in fact does "prevent" bacterial infections in chickens. Without such evidence from the specification or other evidence on the record there is no substantial showing that bacterial infections will be prevented in chickens.

#### ***Claim Rejections - 35 USC § 102***

Claims 1, 3, 6-8, 13, 15, 17, 21 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2,287,867 (GB).

Applicant argues that there is no suggestion in GB that the xylanase or cellulase would have any effect whatsoever on infections caused by *Salmonella*, *Campylobacter* or *Clostridium*. Applicant also argues that the reference does not teach that the enzymes disclosed would be effective in treating any kind of bacterial infection as feed producers have routinely and commonly added antibiotics to their feed in order to prevent and treat bacterial infections.

Applicant's claims are directed to giving a xylanase or beta-glucanase to an animal via an animal feed. This is all the claims require. The process is a one step process which clearly reads on the reference. Applicants have not added any different steps to the method. Thus, the method of the instant claims and the method in the reference are the same.

It is inherent to the process of the reference and applicant's invention that infections caused by *Salmonella*, *Campylobacter* or *Clostridium* will be treated or prevented upon the administration of the xylanase or beta-glucanase. There is nothing found in the process of applicant's invention that differs from the process of GB. Since the same composition is being administered to the animal in both the reference and the instant invention, the claims are so anticipated.

Claims 1, 3, 6-8, 13, 15, 17, 18, 21-26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Bedford et al. ('055).

Applicant argues that there is no suggestion in '055 that the xylanase or cellulase would have any effect whatsoever on infections caused by *Salmonella*, *Campylobacter* or *Clostridium*. Applicant also argues that the reference does not teach that the enzymes disclosed would be effective in treating any kind of bacterial infection as feed producers have routinely and commonly added antibiotics to their feed in order to prevent and treat bacterial infections.

Applicant's claims are directed to giving a xylanase or beta-glucanase to an animal via an animal feed. This is all the claims require. The process is a one step process which clearly reads on the reference. Applicants have not added any different steps to the method. Thus, the method of the instant claims and the method in the reference are the same.

It is inherent to the process of the reference and applicant's invention that infections caused by *Salmonella*, *Campylobacter* or *Clostridium* will be treated or prevented upon the administration of the xylanase or beta-glucanase. There is nothing found in the process of applicant's invention that differs from the process of '055. Since the same composition is being administered to the animal in both the reference and the instant invention, the claims are so anticipated.

Claims 1, 3, 6-8, 13, 15, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Clarkson et al.

Applicant argues that the reference does not describe or suggest a method for treating or preventing bacterial infections in animals as claimed. Applicant also argues

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that there is no suggestion in Clarkson that the xylanase would have any effect whatsoever on *Salmonella*, *Campylobacter* or *Clostridium*, either in the feed or an animal. Applicant finally argues that the reference does not teach a method of using enzymes for treating or preventing infections caused *Salmonella*, *Campylobacter* or *Clostridium* in an animal as claimed.

Applicant's claims are directed to giving a xylanase to an animal via an animal feed. This is all the claims require. The process is a one step process which clearly reads on the reference. Applicants have not added any different steps to the method. Thus, the method of the instant claims and the method in the reference are the same.

It is inherent to the process of the reference and applicant's invention that infections caused by *Salmonella*, *Campylobacter* or *Clostridium* will be treated or prevented upon the administration of the xylanase. There is nothing found in the process of applicant's invention that differs from the process of Clarkson. Since the same composition is being administered to the animal in both the reference and the instant invention, the claims are so anticipated.

Claims 1, 3, 6-8, 13, 15, 17, 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hansen et al.

Applicant argues that the reference does not describe or suggest a method for preventing infections in animals caused by *Salmonella*, *Campylobacter* or *Clostridium* in animals as claimed. Applicant also argues that there is no suggestion in Hansen

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regarding a method for preventing or treating infections caused by bacteria in an animal or in the feed.

Applicant's claims are directed to giving a xylanase to an animal via an animal feed. This is all the claims require. The process is a one step process which clearly reads on the reference. Applicants have not added any different steps to the method. Thus, the method of the instant claims and the method in the reference are the same.

It is inherent to the process of the reference and applicant's invention that infections caused by *Salmonella*, *Campylobacter* or *Clostridium* will be treated or prevented upon the administration of the xylanase. There is nothing found in the process of applicant's invention that differs from the process of Hansen. Since the same composition is being administered to the animal in both the reference and the instant invention, the claims are so anticipated.

Claims 21-26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Borriss et al., see abstract, col. 3, line 62-col. 4, line 12, col. 11, line 65-col. 12, line 23, and the claims.

The reference teaches that wheat expresses a beta-glucanase and that such a composition is added to a feed to be given to animals.

Claims 1, 3, 6-8, 13, 15, 17, 18, 21-26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Bedford et al. '678 ('678), see abstract, example 1, and the claims.

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The reference teaches that xylanase or a beta-glucanase is added to an animal feed also containing wheat and then given to an animal.

***Claim Rejections - 35 USC § 103***

Claims 1, 3, 6-8, 13, 15, 17, 18, 21-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,287,867 in view of Bedford '055 or Bedford '678.

Applicant argues that the mere fact that the feed additives have been given to chickens and chickens are known to suffer from *Salmonella* infections would not lead one of ordinary skill in the art to believe that such an additive would have any effect on such an infection.

Applicant's claims are directed to giving a xylanase and/or beta-glucanase to an animal via an animal feed. This is all the claims require. The process is a one step process which clearly reads on the reference. Applicants have not added any different steps to the method. Thus, the method of the instant claims and the method in the reference are the same.

It is inherent to the process of the reference and applicant's invention that infections caused by *Salmonella*, *Campylobacter* or *Clostridium* will be treated or prevented upon the administration of the xylanase. There is nothing found in the process of applicant's invention that differs from the process of the references. Since



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the same composition is being administered to the animal in both the reference and the instant invention, the claims are so anticipated.

Applicant has argued that there is a "long felt need" in the art for this invention. As shown above, the invention was known in the art. Applicant has not established that such a "long felt need" really exists and how one of ordinary skill in the art at the time the invention was made would not have been motivated to arrive at applicant's invention for which such motivation has been clearly laid out herein.

Claims 1, 3, 6-8, 13, 15, 17, 18, 21-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarkson et al. in view of Bedford '055 or Bedford '678.

Applicant argues that the references teach nothing regarding the use of xylanase in treating or preventing bacterial infections. Further applicant argues that the combination of references would not teach one that xylanase or cellulase additions to feeds would be effective in preventing or treating bacterial infections.

Applicant's claims are directed to giving a xylanase and/or beta-glucanase to an animal via an animal feed. This is all the claims require. The process is a one step process which clearly reads on the reference. Applicants have not added any different steps to the method. Thus, the method of the instant claims and the method in the reference are the same.

It is inherent to the process of the reference and applicant's invention that infections caused by *Salmonella*, *Campylobacter* or *Clostridium* will be treated or prevented upon the administration of the xylanase. There is nothing found in the process of applicant's invention that differs from the process of the references. Since the same composition is being administered to the animal in both the reference and the instant invention, the claims are so anticipated.

Applicant has argued that there is a "long felt need" in the art for this invention. As shown above, the invention was known in the art. Applicant has not established that such a "long felt need" really exists and how one of ordinary skill in the art at the time the invention was made would not have been motivated to arrive at applicant's invention for which such motivation has been clearly laid out herein.

Claims 1, 3, 6-8, 13, 15, 17, 18, 21-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. in view of GB 2,287,867.

Applicants argue that these references make no mention of the use of these enzymes in a method for treating bacterial infections caused by specific bacteria as claimed. Further, applicants argues that there is no mention made that the enzymes themselves have any effect whatsoever on the harmful bacteria, either in the feed or in the animal.

Applicant's claims are directed to giving a xylanase and/or beta-glucanase to an animal via an animal feed. This is all the claims require. The process is a one step

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process which clearly reads on the reference. Applicants have not added any different steps to the method. Thus, the method of the instant claims and the method in the reference are the same.

It is inherent to the process of the reference and applicant's invention that infections caused by *Salmonella*, *Campylobacter* or *Clostridium* will be treated or prevented upon the administration of the xylanase. There is nothing found in the process of applicant's invention that differs from the process of the references. Since the same composition is being administered to the animal in both the reference and the instant invention, the claims are so anticipated.

Applicant has argued that there is a "long felt need" in the art for this invention. As shown above, the invention was known in the art. Applicant has not established that such a "long felt need" really exists and how one of ordinary skill in the art at the time the invention was made would not have been motivated to arrive at applicant's invention for which such motivation has been clearly laid out herein.

Claims 1, 3, 6-8, 13, 15, 17, 18, 21-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borriss et al. in view of Bedford et al. '055 or Bedford et al. '678.

The teachings of Borriss are above. Borriss does not teach to use a xylanase instead of a beta-glucanase.

The Bedford references clearly teach that xylanases or beta-glucanases can be used interchangeably in the feed composition.

It would have been obvious to change the feed composition of Borriss from one containing beta-glucanase to one containing xylanase since both enzymes are taught by the Bedford references as being interchangeable and equally effective in being used in feed compositions for treating diseases and/or help digestibility of the feed.

Applicant has argued that there is a "long felt need" in the art for this invention. As shown above, the invention was known in the art. Applicant has not established that such a "long felt need" really exists and how one of ordinary skill in the art at the time the invention was made would not have been motivated to arrive at applicant's invention for which such motivation has been clearly laid out herein.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Meller whose telephone number is 703-308-4230. The examiner can normally be reached on Monday thru Friday: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 703-306-3220. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0294 for regular communications and 703-308-0294 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



Michael V. Meller  
Primary Examiner  
Art Unit 1654

MVM  
December 13, 2002